

Abstract of the Disclosure

Disclosed is a color polymer dispersed liquid crystal display comprising: a lower substrate; an upper substrate 5 formed on the lower substrate with a predetermined space therebetween; color liquid crystal-polymer films formed by foaming polymer films mixed respectively with red, green and blue pigments to form porous films of red, green and blue colors and then dropping and injecting a liquid crystal into 10 droplets of the porous films under vacuum condition; and two transparent liquid crystal driving electrodes, one disposed between the lower substrate and the PDLC films and the other disposed between the PDLC films and the upper substrate. Also disclosed is a method for manufacturing a color polymer 15 dispersed liquid crystal display, comprising the steps of: forming pixel electrodes on a lower substrate; forming polymer films mixed respectively with red, green and blue pigments on the lower substrate including the pixel electrodes; forming porous films of red, green and blue 20 colors by foaming the polymer films; forming color liquid crystal-polymer films by dropping and injecting a liquid crystal into droplets of the porous films under vacuum condition; and combining an upper substrate having a common electrode on the inside surface thereof with the lower

substrate including the color liquid crystal-polymer films. Since the present invention prepares the liquid crystal-polymer films by foaming polymer films mixed with red, green and blue pigments to form porous films and then dropping and 5 injecting a liquid crystal into the porous films under vacuum condition, it is possible to reduce changes in properties of the PDLC films which may be caused by unstable phase separation in a conventional phase separation process. In addition, the present invention using pigments can produce 10 further improved colors.